

KM3. EXCURSIONS ON CAPACITIES

By MVRDV

Sounding like a newly discovered element from the periodic table and feeling about the weight of a small car, KM3 is a veritable 'War and Peace' of architectural theory and ideas. With over 1400 pages it was originally conceived (perhaps sensibly) as a set of separate volumes to be released over time, but it has now been published as a single compendium with accompanying DVD and software. As the sequel to MVRDV's previous book FARMAX (1998) -which was an acronym for explorations in floor area ratios (density)- KM3 takes this interest in 'the stack' (the 3D city) to a whole new level of intensity and experimentation.

As we consume more; use more energy; take up more space; we are emerging into a condition of living in one continuous scape of bland, low-density urban matter. If we were all to follow the lifestyle of the typical US citizen, then we would need four earths to support us. This crisis of a creeping global sprawl -the Universal City as Winy Maas refers to it- necessitates a search for alternative strategies. MVRDV explore these alternatives in KM3, and take them to an almost surreal but logical extreme



0.2 Preface_Definition

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Three-dimensionality can be seen as architecture's fundamental existence, the profession's acclaimed domain. In times of globalization and scale enlargement, an update of this definition seems needed: meters turn into kilometers, M3 becomes

KM3

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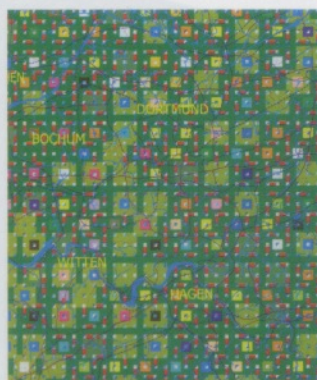
"KM3 is a massive book; part manifesto; part monograph, it is a provocation that is deeply optimistic and at times exhaustingly extensive."

in proposing a 'vertical urbanism' of consolidation, programmatic density and spatial compaction.

In 'Climate World' the earth is described spinning closer to disaster with a rapidly increasing population and ever decreasing resources. The consequences of our throw-away consumer lifestyles are inevitably: melting ice caps, global temperature shifts, already arid lands dying out further, cities shrouded in smog and urban centres subject to wide-scale flooding.

But what can be done? As well as proposing ideas such as: conveying excess water from Europe by viaduct

to dryer regions; aeroplanes that spray sulphate particles (promoting cooling); and satellite parasols to shade areas scorched by too much sun; it is in the strategic deployment of architecture and urbanism that MVRDV believe lie the key factors in addressing climate change. Chicago is shown dramatically modified to reduce its reliance on air-conditioning and fossil fuels -sidestepping the superficialities of urban design and taking a quantum leap in 'brainstorming' urban sustainability. But KM3 asks can we go further? Can we control our own weather? Instead of the militarisation of space maybe we can redeploy our resources and venture the impossible: the design and control of our weather systems?



Our limited attempts at structuring development (sprawl) by zoning, has operated mainly in only two-dimensions. As such our ability to imagine richer spatial alternatives has been somewhat limited. Zoning has in part -due to its inherent dispersal of activities- accelerated the spread of urban matter rather than consolidate it. So KM3 asks: is the answer to adopt an intricacy of vertical ▶

► density and of stacked multi-layered programmes? If so, what new configurations could this take? Infrastructure, landscape, housing, recycling, leisure (to name only a few) are all collated in data form and re-imagined in new combinations using computer modelling. Previously known for Metacity/Datatown (which is included in the DVD) 'Cube' by MVRDV/Berlage Institute/Wieland & Gouwens imagines a dense vertical city for 1 million inhabitants. Here the platonic form of the cube is hollowed out into interconnecting realms of production, living, refuse, housing, etc, that interact like the mutations of differing biological systems. This imagined city -stratified in self-negotiating and interdependent territories- is compacted into a massive 3.37km squared cube. Perhaps one of the largest megastructure ever conceived, we zoom in and out of its zones in the DVD with deliberate sci-fi zeal.

To place this gargantuan speculation in context, there is a guide to previous megastructures -a timeline showing projects by Hollien, Fuller, the Metabolists, Raymond Hood, Paolo Soleri, and many more. We can reconsider these similar ideas to that of 'Cube', that have now been consigned to history. 'Cube' is also featured as a dance piece by Scapino Ballet in Rotterdam, where the dancers "...try to survive within the spectacle of the city..." amidst large computer back-projections. With 'Cube', KM3 strikes at the core of our urban decorum with deliberate effect: we are happy to collate and document bureaucratic mountains of statistics, but to actually shape a city out of it?

Most of the projects shown in this book are presented as fragments of MVRDV's wider urban theory: Frøsilo, Silodam, Matsudai, Hagen Island and Mirador all reveal their concerns for density and vertical programming. Within the work there are also many sub themes, such as the term 'Advertise' where projects become huge typographic billboards -tuned into the 'bilbao effect' where building is brand. The project for the Museum of Galicia is an example of this. The geographic profile of this part of Spain is elevated as a caricature silhouette, and the floors become the sedimentary strata containing the culture of the region.



Able to manoeuvre nimbly between imagining new regional plans for the Netherlands, Switzerland, China and Rhein Ruhr City, MVRDV are equally at home in producing unique buildings for housing, offices, pavilions and museums. The DVD shows the intelligence and spatial quality of a number of their unrealised projects by virtual walk-throughs, and suggest that they still await a larger project to reveal what they are capable of.

KM3 is a massive book; part manifesto; part monograph, it is a provocation that is deeply optimistic and at times exhaustingly extensive. There is an admirable and impressive breadth of vision to MVRDV's approach: ranging from that of the

quick fire idea, organising multidisciplinary collaborations to sophisticated and informed global urban thinking. Here the role and imagination of the architect is not condemned to reacting only to the whims of the marketplace, but free as independent thinkers to speculate on a multitude of new possibilities. Architecture has always needed thinkers and MVRDV are unhesitating in their search to discover through KM3, both a new urban hypothesis and a theoretical framework to construct their innovative buildings. ●

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HB 1408pp with DVD and software

€65 www.actar.es

